

Project:

Student has to participate in classes and do 2 projects. Projects are pointed.

Project No 1 - 15 points

Project No 2 - 25 points

Evaluation:

- 5,0 (A) 100-96% of total number of points
- 4,5 (B) 95%-86% of total number of points
- 4,0 (C) 85%-76% of total number of points
- 3,5 (D) 75%-66% of total number of points
- 3,0 (E) 65%-51% of total number of points
- 2,0 (F) less than 51% of total number of points

Laboratory:

Student has to submit all reports and pass the written tests.

Lectures (exam):

Written exam (student has to solve practical and theoretical problems) The problems are pointed.

Evaluation:

- 5,0 (A) 100-96% of total number of points
- 4,5 (B) 95%-86% of total number of points
- 4,0 (C) 85%-76% of total number of points
- 3,5 (D) 75%-66% of total number of points
- 3,0 (E) 65%-51% of total number of points
- 2,0 (F) less than 51% of total number of points

Strength of materials – theoretical problems - exam

1. Moment of inertia of an area. Parallel axis theorem. Principal axes and principal moment of inertia.
2. Stress, strain, and deformation of axially loaded bars .

3. Analysis of torsion of circular bar.
4. Bending and shearing – normal stress and shear stress.
5. Beam deflection and slope: Double integration method
6. Beam deflection and slope: Conjugate Beam method
7. Beam deflection and slope: Maxwell-Mohr's method .
8. Combined loading – complex bending and shearing
9. Eccentrically loaded short columns. Core section.
10. Column buckling.